



2024

Annual Drinking Water Quality Report PWS ID: 42004699

This report contains important information about your drinking water. Have someone translate it for you or talk to someone who understands it.

Este informe contiene información importante acerca de se agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Dlaim ntawv tshaabzu nuav muaj lug tseemceeb heev nyob rua huv kws has txug cov dlej mej haus. Kuas ib tug paab txhais rua koj, los nrug ib tug kws paub lug thaam.

This annual report complies with federal and state drinking water regulations, which require us to provide water quality information to our customers each year. The report is designed to inform you about the quality of Fond du Lac's municipal water supply. Our goal is to provide you with a safe and dependable supply of drinking water every day. Unless otherwise noted, results are based on testing conducted in 2024.

Water System Information

If you have any questions or would like additional information about this report, please contact Water Utility General Manager Travis Kloetzke at 920-322-3683 or emailing tkloetzke@fdl.wi.gov. You can learn more about Fond du Lac Waterworks by visiting our website at <https://www.fdl.wi.gov/water/>. We also welcome you to provide public input at the Fond du Lac City Council meetings which are held regularly at 6:00 pm on the 2nd and 4th Wednesday of each month in the Council Chambers of the City/County Government Center located at 160 South Macy Street in Fond du Lac.

Health Information

Fond du Lac Waterworks continuously monitors and tests the water delivered to its customers daily to ensure conformance with State and Federal drinking water standards and regulations. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as person with cancer undergoing chemotherapy, person who have undergone organ transplants, people with HIV/AIDS or other immune systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791)

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Fond Du Lac Waterworks is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested,

contact Fond Du Lac Waterworks Kelly Boodry at (920) 322-3688. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

Compliance

We were required to develop an initial inventory of service lines connected to our distribution system by October 16, 2024, and to make the inventory publicly accessible. The Utility submitted an inventory by the October 16, 2024 deadline, and also made that inventory publicly accessible. You can access the service line inventory by requesting a copy of Fond du Lac Waterworks initial LCRR Service Line Materials Inventory at fdlwater@fdlwi.gov.

Upon review of the inventory by the EPA, there were administrative inconsistencies within the inventory which led to the violation noted in this section of the CCR. This violation does not affect water quality, it is strictly administrative. The inconsistencies are being rectified and will be resubmitted to the EPA by the end of March 2025. The duration of which the violation will exist depends on the length of time it takes the EPA to complete their review. A tier 2 public notice will be sent to all customers of the utility by the end of March 2025.

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilsons Disease should consult their personal doctor.

Water Source

Fond du lac Waterworks source water comes from 17 deep wells from in and around the City of Fond du Lac. These wells range in depth from 745' to 1,150'. Water is then pumped to one of four water treatment plants where radium is removed, and chlorine is added as a disinfectant. Water is stored in five different ground storage reservoirs and three elevated storage towers before it is pumped through 222 miles of water main using six supply and distribution booster pump stations before it ends in the homes of roughly 16,000 plus customers. If you would like a summary of the source water assessment, please contact the Water Utility General Manager.

Source ID	Well Field	Treatment Plant	Source	Depth (ft)	Status
10	North	Merrill WTP	Groundwater	855	Active
11	North	Merrill WTP	Groundwater	760	Active
12	North	Merrill WTP	Groundwater	745	Active
13	North	Merrill WTP	Groundwater	790	Active
14	Stand Alone	McDermott WTP	Groundwater	835	Active
15	North	Merrill WTP	Groundwater	775	Active
16	South	Trowbridge WTP	Groundwater	970	Active
17	South	Trowbridge WTP	Groundwater	1025	Active
18	South	Trowbridge WTP	Groundwater	950	Active
19	South	Trowbridge WTP	Groundwater	870	Active
20	South	Trowbridge WTP	Groundwater	910	Active
21	Stand Alone	Well 21 WTP	Groundwater	783	Active
23	South	Trowbridge WTP	Groundwater	965	Active
24	South	Trowbridge WTP	Groundwater	1055	Active
25	South	Trowbridge WTP	Groundwater	1150	Active
26	North	Merrill WTP	Groundwater	816	Active
27	North	Merrill WTP	Groundwater	824	Active

Educational Information

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
HA	Health Advisory: An estimate of acceptable drinking water levels for a chemical substance based on health effects information.
HAL	Health Advisory Level: A concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice. Health advisories are determined by US EPA.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MRDL	Maximum residual disinfectant level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum residual disinfectant level goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter (ng/l)
PHGS	Public Health Groundwater Standards are found in NR 140 Groundwater Quality. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
RPHGS	Recommended Public Health Groundwater Standards; Groundwater standards proposed by the Wisconsin Department of Health Services. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
SMCL	Secondary drinking water standards or Secondary Maximum Contaminant Levels for contaminants that affect taste, odor, or appearance of the drinking water. The SMCLs do not represent health standards.

Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Disinfection Byproducts								
Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contamination
HAA5 (ppb)	D-2	60	60	11	9-11		No	By-product of drinking water chlorination
HAA5 (ppb)	D-12	60	60	9	7-11		No	By-product of drinking water chlorination
HAA5 (ppb)	D-42	60	60	5	4-5		No	By-product of drinking water chlorination
HAA5 (ppb)	D-51	60	60	9	7-15		No	By-product of drinking water chlorination
TTHM (ppb)	D-2	80	0	38.5	27.9-49.2		No	By-product of drinking water chlorination
TTHM (ppb)	D-12	80	0	37.1	24.3-48.9		No	By-product of drinking water chlorination
TTHM (ppb)	D-42	80	0	18.4	13.4-23		No	By-product of drinking water chlorination
TTHM (ppb)	D-51	80	0	32.4	19.3-48.3		No	By-product of drinking water chlorination

Inorganic Contaminants								
Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contamination	
Arsenic (ppb)	10	n/a	3	0-3	5/22/23	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	
Barium (ppm)	2	2	0.05	0.034-0.050	5/22/23	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Fluoride (ppm)	4	4	0.6	0-0.6	5/22/23	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Nickel (ppb)	100		2.4	1.1-2.4	5/22/23	No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel, and alloy products.	
Nitrate (NO3-N)(ppm)	10	10	0.07	0-0.07		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Selenium(ppb)	50	50	3	0-3	5/22/23	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines	
Sodium(ppm)	n/a	n/a	55	42-55	5/22/23	No	n/a	
Lead & Copper								
Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2024)	Violation	Typical Source of Contamination	
Copper (ppm)	AL=1.3	1.3	0.49	0 of 30 results were above the action level	6/22/2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
Lead (ppb)	AL=15	0	9.5	1 of 30 results were above the action level	6/22/2021	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Radioactive Contaminants								
Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contamination	
Gross Alpha, Excl R&U (pCi/l)	15	0	5	0.1-5.0		No	Erosion of natural deposits	
Radium, (226 + 228)(pCi/l)	5	0	1.5	0.6-1.5		No	Erosion of natural deposits	
Gross Alpha, Incl. R&U (n/a)	n/a	n/a	5.6	0.4-5.6		No	Erosion of natural deposits	
Combined Uranium (ug/l)	30	0	1.1	0.5-1.1		No	Erosion of natural deposits	
Volatile Organics								
Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2024)	Violation	Typical Source of Contamination
Toluene (ppm)		1	1	0.0003	0.0000 - 0.0003	5/22/23	No	Discharge from petroleum factories

Contaminants with a Public Health Groundwater Standard, Health Advisory Level, or a Secondary Maximum Contaminant Level

The following table lists contaminants which were detected in your water and that have either a Public Health Groundwater Standard (PHGS), Health Advisory Level (HAL), or a Secondary Maximum Contaminant Level (SMCL), or both. There are no violations for detections of contaminants that exceed Health Advisory Levels, Public Health Groundwater Standards or Secondary Maximum Contaminant Levels. Secondary Maximum Contaminant Levels are

levels that do not present health concerns but may pose aesthetic problems such as objectionable taste, odor, or color. Public Health Groundwater Standards and Health Advisory Levels are levels at which concentrations of the contaminant present a health risk.

Contaminant (units)	SMCL (ppm)	PHGS or HAL (ppm)	Level Found	Range	Sample Date (if prior to 2024)	Typical Source of Contamination
Chloride (ppm)	250		120	79-120	8/24/20	Runoff/Leaching from natural deposits, road salt, water softeners
Sulfate (ppm)	250		170	89-170	5/22/23	Runoff/leaching from natural deposits, industrial wastes

Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in Determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

Contaminant (units)	Level Found (ppb)	Range (ppb)	Sample Date (if prior to 2024)	Typical Source of Contamination
Bromodichloromethane (ppb)	3.7	0-3.7	5/22/23	By-product of drinking water chlorination
Bromoform (ppb)	39	0.43-39	5/22/23	By-product of drinking water chlorination
Chloroform (ppb)	0.8	0-0.8	5/22/23	By-product of drinking water chlorination
Dibromoacetic Acid (ppb)	8.51	2.8-8.51	5/22/23	By-product of drinking water chlorination
Dibromochloromethane (ppb)	14	0.34-14	5/22/23	By-product of drinking water chlorination
Dibromomethane (ppb)	0.95	0 - 0.95	5/22/23	By-product of drinking water chlorination
Dichloroacetic Acid (ppb)	0.99	0-0.99	5/22/23	By-product of drinking water chlorination
Monobromoacetic Acid (ppb)	1.1	0-1.1	5/22/23	By-product of drinking water chlorination
Trichloroacetic Acid (ppb)	0.38	0-0.38	5/22/23	By-product of drinking water chlorination

Unregulated Contaminant Monitoring Rule (UCMR)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

UCMR 4				
Contaminant (units)	Level Found	Range	Sample Date (if prior to 2024)	Typical Source of Contamination
1,3-dimethyl-2-nitrobenzene	85	82-85	7/1/2020	
1-Butanol-d10	97	77-97	7/1/2020	
2-Bromobutanoic Acid	130	110-130	7/1/2020	
2-Propen-1-ol-d6	90	72-90	7/1/2020	
Benzo[a]pyrene-d12	99	84-99	7/1/2020	
Bromochloroacetic acid (BCAA) (ppb)	1.3	0.35-1.3	7/1/2020	
Chlorodibromoacetic acid (CDBAA)(ppb)	1.3	0.33-1.3	7/1/2020	
Dibromoacetic acid (DBAA)(ppb)	6.3	3.6-6.3	7/1/2020	
Dichloroacetic acid (DCAA)(ppb)	0.46	0-0.46	7/1/2020	
Monobromoacetic acid (MBAA)(ppb)	1	0.47-1.0	7/1/2020	
o-toluidine-d9	79	51-79	7/1/2020	
quinoline-d7	92	81-92	7/1/2020	
Tribromoacetic acid (TBAA)(ppb)	2.7	0-2.7	7/1/2020	
Triphenyl phosphate	96	80-96	7/1/2020	
Bromide, as Br- (unfiltered)(ppb)	1400	140-1400	7/1/2020	
Manganese (ppb)	1.2	0-1.2	7/1/2020	

Total Organic Carbon (ppb)	1100	0-1100	7/1/2020	
----------------------------	------	--------	----------	--

Unregulated Contaminant Monitoring Rule (UCMR 5)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring. UCMR 5 included testing for 29 PFAS compounds and lithium. Our water system did not have any detected results in 2023.

Contaminant (ppb)	Level Found	Range	Sample Date (if prior to 2024)	Typical Source of Contamination
Lithium	20	12-20	2023	Lithium can get in groundwater from lithium mining, manufacturing / recycling of batteries that contain lithium
29 PFAS Compounds	ND	ND	2023	Chemicals used for their grease and stain resistance properties. Found in landfills, nonstick cookware, food wrappers, ect.